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## Contributions to Knowledge by Gustavus Detlef Hinrichs, M.D., LL.D. (Paper presented at the Thirty-Eighth Annual Meeting of the Iowa Academy of Science)

Charles Keyes

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CONTRIBUTIONS TO KNOWLEDGE BY GUSTAVUS  
DETLEF HINRICHs, M.D., LL.D.

BY CHARLES KEYES

As an original organizer and charter member of the Iowa Academy of Sciences, that society which is the parent of our present Academy, the latter holds with peculiar attachment the memory of the late Dr. Gustavus Hinrichs, who is, for more than a quarter of a century, also identified with the faculty of our State University as one of its most distinguished members. He further organizes and conducts for 15 years our State Weather Service, the first of the kind to be inaugurated in this country. A brief life-sketch of this gifted man appears in our Proceedings of last year, volume XXX, pages 29-31.

From the date of Professor Hinrichs' initial contribution to science, in 1856, through to the end of his long life, his brilliant mental activities continue unabated. His pen is always as busy as his mind. The procession of his intellectual progeny spans an interval of 70 years! More than a score of ponderous tomes attest the exceptional vigor and great magnitude of his profound efforts and his tireless industry. Several hundreds of memoirs form notable contributions to science in the transactions of the learned societies. A majority of these appear in Europe and in half a dozen different languages. Sixty communications are made to the French Academy of Sciences alone, and over a hundred are printed in the *Moniteur Scientifique* of Paris. Others are included in the publications of the scientific academies of Vienna, Berlin, and Copenhagen. The complete bibliography of his works comprise perhaps the most imposing array of original accomplishments ever produced in this country.

Of the 300 odd memoirs which are accredited to him, 25 are more than usually pretentious and are listed as books. These are:

Die Electromagnetische Telegraphie, Hamburg, 1856.

Die Erdmagnetismus, Copenhagen, 1860.

American Scientific Monthly, Iowa City, 1870.

Elements of Physics, Davenport, 1870.

Elements of Chemistry and Mineralogy, Davenport, 1870.

School Laboratory of Physical Science, Volume I, Iowa City, 1871.

School Laboratory of Physical Science, Volume II, Iowa City, 1872.

Principles of Chemistry and Molecular Mechanics, Davenport, 1874.

Annual Reports of Iowa Weather Service, 11 volumes, 1878 to 1888.

True Atomic Weights of the Chemical Elements; and the Unity of Matter, St. Louis, 1894.

Introduction to General Chemistry, St. Louis, 1897.

Absolute Atomic Weights of the Chemical Elements, St. Louis, 1901.

Introduction to Crystallographic Chemistry, St. Louis, 1904.

Proximate Constituents of Chemical Elements Mechanically Determined from their Physical and Chemical Properties, St. Louis, 1904.

Amana Meteorites of February 12, 1875, St. Louis, 1905.

In the midst of an unusually strenuous college life, when his time was taken up with the exacting duties of a new and much undermanned department, and the organization and direction of no less than three large laboratories, his contributions to knowledge appear regularly at the rate of about five or six each year for sixty years. His most productive years are those immediately following his retirement from the Iowa State University, after his removal to St. Louis, and before he there is inveigled into college work again. During these two years he prepares and publishes 43 memoirs. The circumstance is instructive as indicating how prolific he might have been had the Fates but permitted him to devote his entire energies to research work.

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